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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,235	10/19/2001	Scott A. Rice	C01-02	7870

7590

01/30/2003

D. Michael Burns
Acushnet Company
333 Bridge Street
Fairhaven, MA 02719

EXAMINER

DUONG, THANH P

ART UNIT

PAPER NUMBER

3711

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,235

Applicant(s)

RICE, SCOTT A.

Examiner

Tom P Duong

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 1-27 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1-27 of copending Application No. 10/047,321. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 5, 13, 15, and 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as

Art Unit: 3711

to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification on page 5, lines 11-15 discloses a face perimeter 19 having a thickness less than 0.09 inches or preferably approximately 0.08 inch; however, Claim 5 recites the face perimeter thickness of 0.8 inches. It appears that the shell thickness or edge thickness of the face perimeter is approximately 0.08 inches instead of 0.8 inches. Applicant is required to confirm the above dimension. In claims 13 and 15, the claims recite "the wall of the insert has a uniform thickness between...inches and ...inches" are not enabling. In claim 17, the claim recites "the wall has a uniform constant thickness of between..." is not enabling.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the phrase "...suitable distance from either from the transition junctions..." is indefinite and inaccurate. In claims 13 and 15, the claims recite "the wall of the insert has a uniform thickness between...inches and ...inches" are indefinite and inaccurate. It appears that the wall of the insert has variable thicknesses. In claim 17, the claim recites "the wall has a uniform constant thickness of between..." is indefinite and inaccurate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 9-12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa et al. (6,334,817). Regarding claims 1, 4, Ezawa et al. discloses a golf club head 10 comprising a hollow body 11 having a face 12 welded to the body; a body include a heel portion, a toe portion, a crown portion, a sole plate, skirt portion. (Figures 1-2). The face securing opening 11b of Ezawa 817' provides securing and support means to the face 12 and such face securing opening is functionally equivalent to the face perimeter of the claimed invention. Regarding claims 2-3, Ezawa does not disclose expressly the dimension of the opening 11b but it appears that Ezawa's opening 11b have sufficient transition length and thickness to support the face and allows the face to be welded to the opening 11b. Regarding claims 6, 10 and 12, Ezawa discloses the main head body can be cast (Col. 2, lines 41-45) and also the golf club of the prior art can be made of various titanium alloys (Col. 1, lines 27-30) and it would have been obvious to use Ti-Alloy here to provide structural strength and corrosion resistance. Regarding claims 9, 11, and 14, Official Notice is taken that under USGA requirements, the standard golf club volume is limited to 350 cc and furthermore, it would have been obvious to maximize the club head here to increase the sweet spot area. Regarding claim 16, Official Notice is taken that typically a higher loft angle

provides a golf ball with higher trajectory, more spin, but reduced in flight distance upon ball impact and lower loft angle will provide lower trajectory, less spin, but increased in flight distance; and it would have been obvious to do so here to control spin and flight distance.

4. Claims 7-8, 13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa et al. (6,334,817) in view of Noble et al (5,954,596) and Kosmatka (6,338,683). Ezawa 817' does not disclose the insert having variable thickness and at least two radii of curvature. Noble et al. teaches the front wall 26 having an increased thickness T1 (0.130-0.180 inch) and decrease thickness at T2 (0.04-0.125) and T3 (0.04-0.125) and such configuration provide good reinforcement to the striking face and maximize mass distribution. (Col. 3, lines 51-52, Col. 4, lines 1-5). Alternatively, Kosmatka teaches the contoured striking face 32" (Col. 4, lines 57-65) improves coefficient of restitution. Thus, it would have been obvious in view of Noble and Kosmatka to one having ordinary skill in the art to include a variable thickness striking face in Ezawa's invention to provide a golf club with good reinforcement to the striking face and/or improve coefficient of restitution.

5. Claims 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa et al. (6,334,817) in view of Masghati et al. (4,471,961) and Sun (5,219,408). Ezawa discloses the claimed invention except a weight disposed in the sole plate. Masghati et al. teaches the weights 93 and 94 increase the moment of inertia and

reduce the club head tendency to rotate around the axis of rotation (Col. 6, lines 45-52). Alternatively, Sun 408 teaches plurality of weights 21a-21f on Figure 3 which to adjust the club head balance and swing. Thus, it would have been obvious in view of Masghati and Sun to one having ordinary skill in the art to add the weights of Masghati and Sun into Ezawa's sole plate to minimize rotation about the axis and to maintain the club head balance. Regarding claim 19, it appears that the club head construction of Ezawa provides the hosel configuration of the claimed invention, and Official Notice is taken that it would have been obvious to have such hosel configuration to improve shaft's support. Claims 24-27 recite limitations similar to claims 1, 18, and 20-23; thus, claims 24-27 are rejected for the same reasons as applied in claims 1, 18, and 20-23, above.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallaway (6,354,962). With respect to claims 1-6 and 10, Gallaway discloses a golf club body having a heel, toe, and crown portion (Figures 2-4); metal impact insert oval shaped or striking face 72 made of titanium material; ribbon 90 functionally equivalent to skirt portion; and a face extension 74 (Col. 6, lines 1-59). The face extension 74 having an upper lateral extension 76 and lower lateral extension 78 which is functionally equivalent to the face perimeter of the claimed invention. The engagement of the face extension 74 with the crown 62 enhances flexibility of the striking plate 72 which allows greater coefficient of restitution. (Col. 6, lines 47-50). With respect to claims 7, 13, 15, and 17, Gallaway discloses the striking plate 72 having the thickest region at the center and the thinnest region at the periphery. (Col. 8, lines 10-34). With respect to claim 8,

the variable thicknesses of the striking face appears to show at least two different radii of curvature. With respect to claims 9, 11, and 14, Gallaway discloses the club head volume of 175-400 cc. (Col. 3, lines 26-40). With respect to claim 12, Gallaway does not disclose expressly the specific titanium material for the body and the striking plate; however, Official Notice is taken that the selection of a specific titanium material is determined by manufacturing cost and material strength and it would have been obvious to use such titanium material here to improve the club's structural strength. Regarding claim 16, Official Notice is taken that typically a higher loft angle provides a golf ball with higher trajectory, more spin, but reduced in flight distance upon ball impact and lower loft angle will provide lower trajectory, less spin, but increased in flight distance; and it would have been obvious to do so here to control spin and flight distance.

7. Claims 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallaway (6,354,962) in view of Masghati et al. (4,471,961) and Sun (5,219,408). Gallaway discloses the claimed invention except a weight disposed in the sole plate. Masghati et al. teaches the weights 93 and 94 increase the moment of inertia and reduce the club head tendency to rotate around the axis of rotation (Col. 6, lines 45-52). Alternatively, Sun 408 teaches plurality of weights 21a-21f on Figure 3 which to adjust the club head balance and swing. Thus, it would have been obvious in view of Masghati and Sun to one having ordinary skill in the art to add the weights of Masghati and Sun into Gallaway's sole plate to minimize rotation about the axis and to maintain the club

head balance. Regarding claim 19, it appears that the club head construction of Gallaway provides the hosel configuration of the claimed invention, and Official Notice is taken that it would have been obvious to have such hosel configuration to improve shaft's support. Claims 24-27 recite limitations similar to claims 1, 18, and 20-23; thus, claims 24-27 are rejected for the same reasons as applied in claims 1, 18, and 20-23, above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (703) 305-4559. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on (703) 308-2126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7768 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-4148.

Tom Duong
January 27, 2003



Paul T. Sewell
Supervisory Patent Examiner
Group 3700